



Facilitating Consumer Response – Choices *Energy Future of the West*

Bozeman, Montana – October 18, 2005


Michael Vogel, Ed.D., Professor
Montana State University – Extension Service
Housing and Environmental Health Program



Montana State University Extension

Making Life Even Better in Your County





Facilitating Consumer Response – Choices

Helping Consumers (end-users) Cope with Escalating Energy Costs ...

- knowing their needs
- understanding what motivates them
- creating outreach efforts



What are Consumers Saying About Energy?

4 surveys – since September 26, 2005

1. Mail survey of 700 limited-income households*
35% response (243 households)
 2. On-line survey** - 94 responses
 3. Consumer “on-the-street” survey ** - 50 individuals
 4. Extension field survey – “what is the pulse of Montana communities”
-

**conducted in MT by MSU Extension*

*** conducted in MT by MSU Extension & DPHHS with recipients of the Montana Low-Income Energy Assistance Programs – 150% FPL*

What are Consumers Saying About Energy?

How much does the higher cost of energy impact you?*

98% some - very much

46% very much

100% some - a lot



*Spending less on food, meds & medical services, household items, clothes.

 = limited-income
 = on-line survey

What are Consumers Saying About Energy?

Does rising gasoline prices impact your ability to go to work or perform necessary errands?

75% YES

41% YES

 = limited-income
 = on-line survey



What are Consumers Saying About Energy?

Will you have to get another job to pay for higher cost of energy?

26% YES

5% already have another job

■ = limited-income





What are Consumers Saying About Energy?

What steps are you taking to reduce your energy costs?

66% / 80% - turning down thermostat

64% / 87% - driving less

56% / 78% - spending less

20% / 51% - home energy conservation

13% / 20% - not sure what to do

 = limited-income
 = on-line survey

What are Consumers Saying About Energy?

What short-term solutions would be most useful for you?



64% / 20% - help in paying for home energy

48% / 63% - utility company discounts

34% / 67% - help in making my home more energy efficient

15% / 57% - tips about saving energy and money

7% / 20% - other

 = limited-income
 = on-line survey






What are Consumers Saying About Energy?

What long-term solutions would be most useful for you?

76% / 65% - reduce the cost of energy

32% / 71% - alternative energy (wind and solar)

 = limited-income
 = on-line survey

Bottom line ... Energy Impacts Real People.

Use tractor less, no electric water tank units, question heat for chicken house, we can't pay our monthly bill in the summer ... don't know how we will cope this winter, the utility has us by the _____, a 3rd job in the household is in the future, we're not like the government, we can't deficit spend, we have no choice – the power bill has to be paid or we freeze or get shut off, shut down the hot-tub this winter, can't afford to go hunting this season, will have to juggle bills, we won't be as warm this winter, have to sacrifice food, clothes ... for the higher energy bills, as a single parent my budget is already tight, grandchildren's gifts will have to be very limited, lower my retirement savings – work longer, lower profit on cattle and farming, be broke and cold, bike to work, walk more, we conserve but it doesn't seem to help, no longer able to deliver church flowers free, GOOD QUESTION!

What are Consumers Saying About Energy?



Bottom line ...

consumers are generally discouraged ...
most believe they have done all they can do ...
“we can’t wait for the big fix to pay the bills”,
“something has to change”

To help consumers cope, we need to understand
what factors motivate them to make positive
energy choices.



What Motivates Consumers to Adopt Positive Energy Behaviors

Top 10 Responses

10

“green, sustainable,
high performance
practices and
materials”



What Motivates Consumers to Make Change? **Top 10 Responses**



9



“Cost-Effective and
Reliable Energy
Sources and
Conservation
Practices”



What Motivates Consumers to Make Change? **Top 10 Responses**



8

**“Real Time
Economics”**

(rather than “it’s not that expensive
when adjusted for inflation” –
“it bites now!”)

What Motivates Consumers to Make Change? Top 10 Responses



7

“Access to affordable
energy-efficient
materials and
knowledgeable labor”



What Motivates Consumers to Make Change? **Top 10 Responses**

6

“strategies that are
Practical and Convenient”

easy to understand
self-help
easy installation
easy to use

What Motivates Consumers to Make Change? Top 10 Responses



5

“result in Comfort”

What Motivates Consumers to Make Change? Top 10 Responses

4

“Access to current, accurate, relevant and non-commercial information”



What Motivates Consumers to Make Change? **Top 10 Responses**



3

**“Healthy
Environments”**

healthy and safe homes and
global environment”

What Motivates Consumers to Adopt Energy Behavior

2

“Quick Return”



What Motivates Consumers to Make Change? **Top 10 Responses**



1

“Affordable”



Recommendations *“from the field”*

- “We can’t conserve our way out of energy problem”
- Greater awareness of available tax credits and awareness of energy assistance programs
- Assist consumer’s with weatherization of older homes
 - include mobile homes
 - reality information – what works, what pays
 - information defining priorities
 - real time energy use
 - self-help programs
- Special assistance to “gap” consumers
 - older consumers - single parent families
- Education to youth
- Need New Ideas with Consumers in Mind

What are Consumers Saying About Energy?




Where do you find the most reliable information about energy?

56% / 49% - Newspaper

23% / 20% - Utility Company

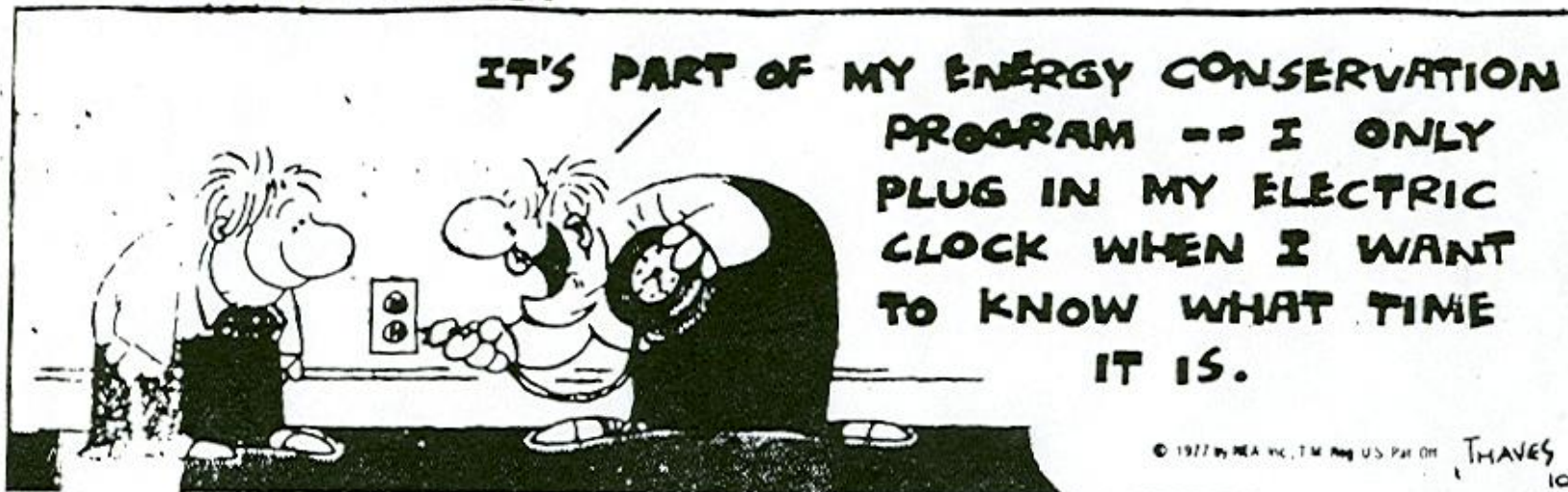
8% / 16% - State or Federal Government

 = limited-income
 = on-line survey



Extension Consumer Outreach Programs that Work

FRANK AND ERNEST



© 1977 by NEA Inc., TM Reg. U.S. Pat. Off. THAVES 10.25

10-25-1977



Department of Energy Central DOE Region Weatherization Training Center

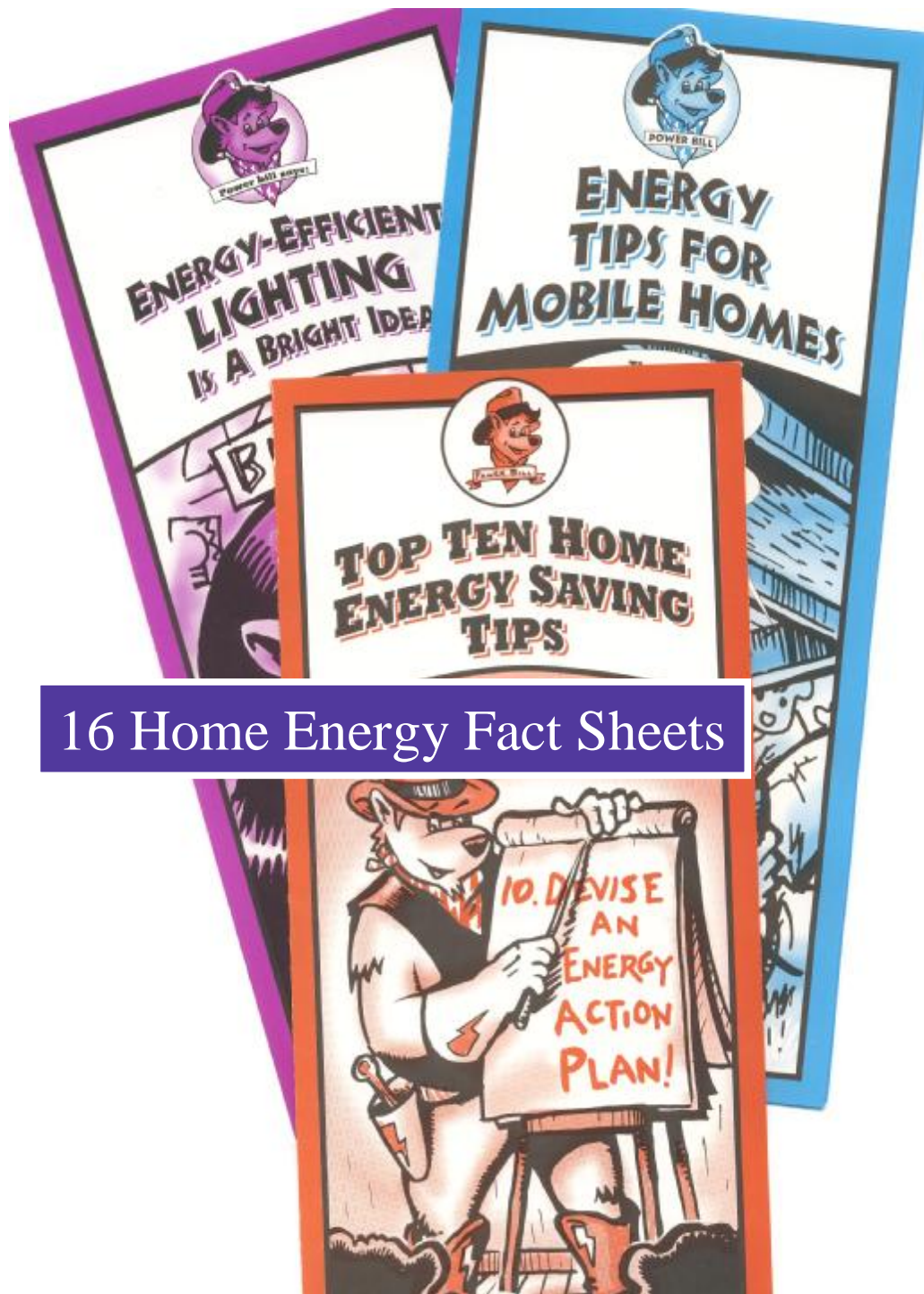
*Dedicated to training the Professional &
Informing Consumers
in Home Energy Conservation &
Weatherization Practices*



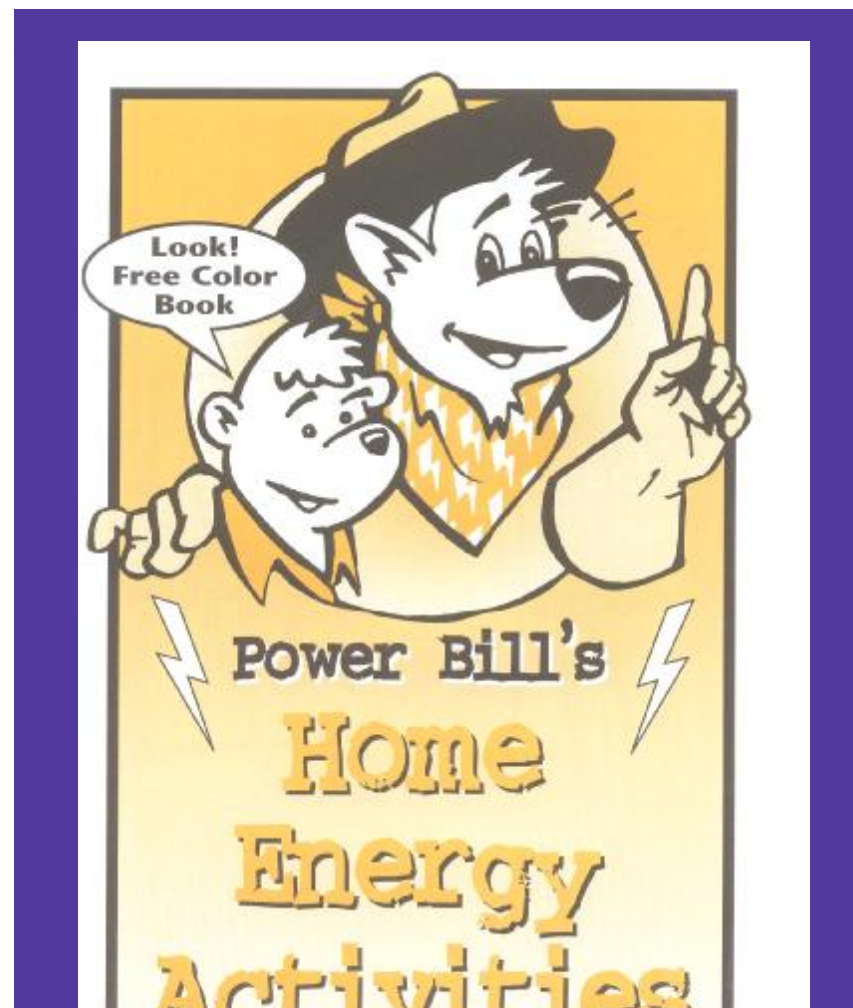
Montana State University Extension Service - Housing Program - Bozeman, MT



Partnership with the Montana Department Public Health and Human Service
Weatherization Assistance Program for Low-Income Families



16 Home Energy Fact Sheets



Available ...

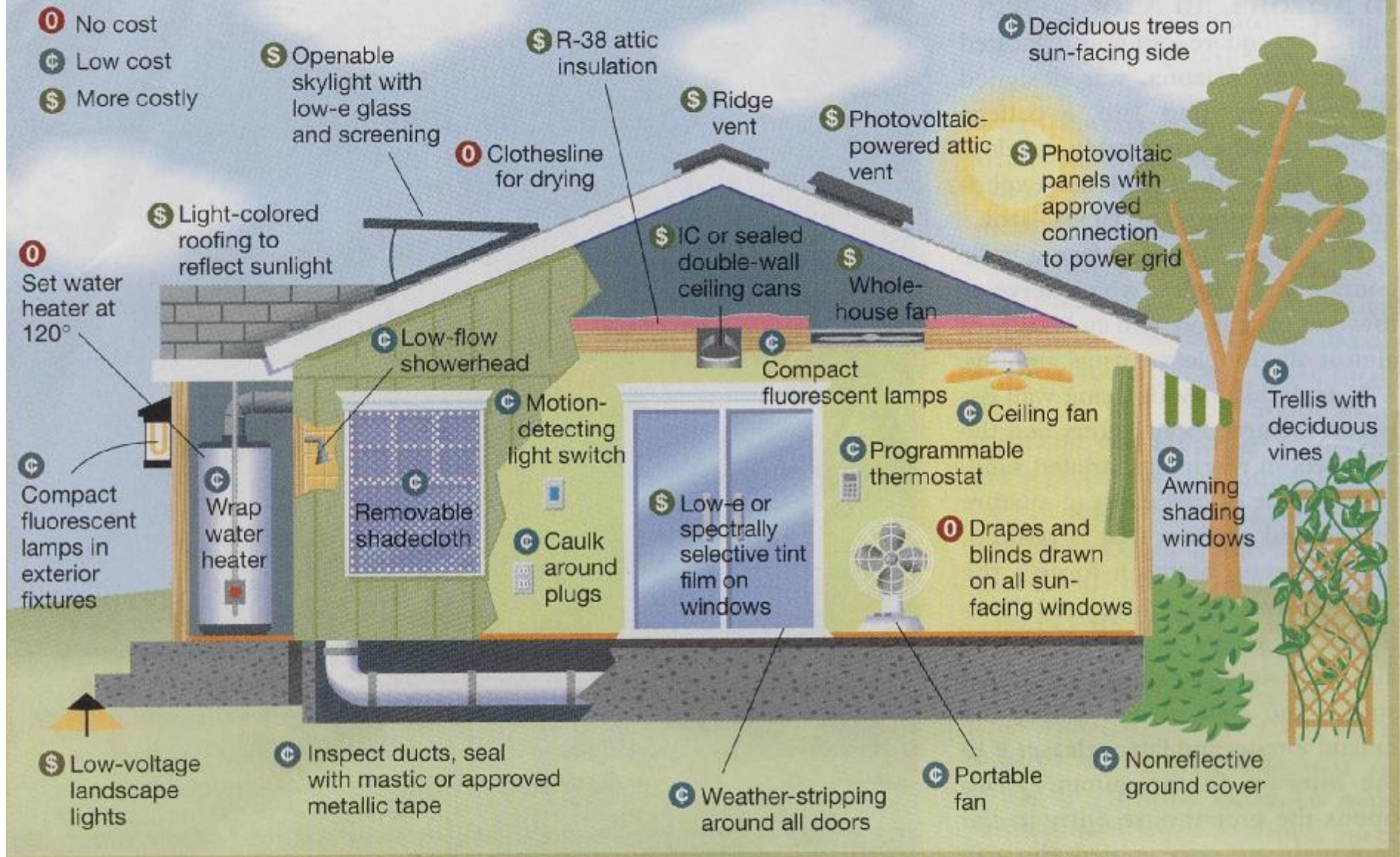
Public Libraries
County/Tribal Extension Offices
HRDCs

www.weatherization.org

www.montanahelp.org

home energy

solutions





ENERGY STAR®

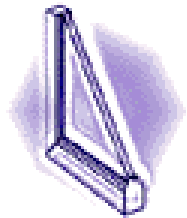


•Appliances

•CFLs

•Home Electronics

•Home Office Equipment



•Windows

•Insulation

•Thermostats

•Homes



•Heating & Cooling

•Lighting Fixtures

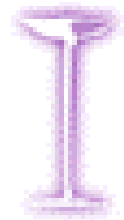
•Ceiling Fans

•Water Coolers

•Ventilating fans

•Dehumidifiers

•Roofing



Home Introduction

Search for homes

Submit a home profile

Contact us

www.homes_across_america.org

A Construction Technology Showcase



... a volunteer community program to help seniors understand the benefits of weatherizing their homes, inform them of local assistance programs and to apply weatherization materials to their homes.



Montana Seniors Energy Project

Montana Seniors Energy Project

Warmer Homes come from volunteer help.

Volunteers of all ages last week visited selected homes in Cascade County to make suggestions for weatherization improvements, according to Montana State University Extension Service agent, Claire Del Guerra.

Del Guerra, who serves Cascade County, said teams of three volunteers visited 154 homes of senior citizens to give tips on installing water-heater jackets, insulation gaskets for electrical outlets, and draft dodgers for doors.

Del Guerra said about 50 volunteers — consisting of senior citizens, Extension Homemakers, youth, aging-services personnel and utility personnel — attended a weatherization workshop and then visited a total of 154 senior citizens in Great Falls and surrounding areas.

The Senior Care program at Montana Deaconess Medical Center provided water-heater wraps, Del Guerra said, while the Montana Department of Natural Resources and Conservation contributed insulation gaskets. The Cascade County Extension Homemakers constructed draft dodgers, the county agent said.

This is the second year that the MSU Extension Service has offered the weatherization reach-out.

Del Guerra said the number of people helped increased to 154 county-wide this year, up from 15 in Great Falls in 1987. Project Outreach is a pilot program, that, if successful in Cascade County, may become an Extension Service statewide program, she said.

Source: Great Falls Tribune, Thursday, January 14, 1988



WEATHERIZE-A-THON—Cascade County Aging Soc. Assoc. Director & volunteer Margaret O'Reilly & Cascade County Ext. Homemaker Council member & volunteer Char Goulet insulate water heater in senior citizens home.



WEATHERIZE-A-THON—Martha Bandel -- Senior citizen, receiving orientation from Claire Del Guerra regarding weatherization practices.



Here's the team who helped Christine Shittle do some energy-related improvements on her home last week. Vernice Larsen is on the left, along with Alyce Tracy, Shittle, Lee Olson, Barbara Hoffmann and Dr. Mike Vogel of MSU in Bozeman. The team attended an energy seminar presented by Vogel the morning of February 23 and energized homes of seven senior citizens here that afternoon. In addition, the seniors were given 'draft dodgers' to put in front of outside doors to keep out the cold. They were made by Sheila Martin, a member of the Far and Wide Homemaker's Club. Photo by Cynthia Markle.

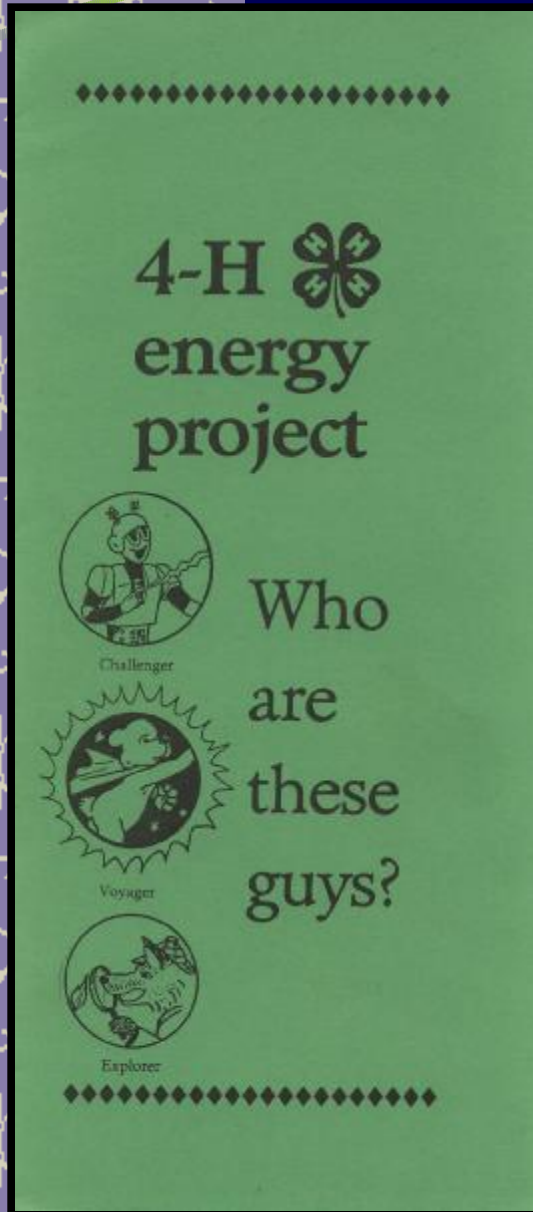
Bernice Larsen, left, and Lee Olson, installed outlet gaskets at the Christine Whittle home as part of the Project Outreach, Senior Citizens Energy Project, of Valley County Extension Homemakers. The women are members of the Baylor Homemakers Club. Photo by Cynthia Markle.



\$15 to \$20 a year is an estimate on what a homeowner in Glasgow can save by putting insulation around a water heater. Dr. Mike Vogel, housing and energy specialist with MSU Extension in Bozeman explains the benefits of the insulation as Alyce Tracy helps install a cover at the Christine Whittle home.

Source: Glasgow Courier, March 3, 1988

Youth Outreach



- 3-levels – ages 9-19
- 75 activities dealing with ...
 - home energy
 - community and school
 - renewable energy
 - agriculture
- 4-H club and school enrichment

HOME ENERGY CONSERVATION

An Educational Program



Developed for
Montana Cooperative Extension Service
Montana Department of Natural
Resources and Conservation

Developed by
Montana State University

YES NO
 HEATED BASEMENT
 LENGTH/FT 1 2
 STORIES
 YES NO
 PATIO DOOR
 YES NO
 E WINDOWS W

WOOD/CORD

GAS/MCF

OIL/GAL

ELECTRICITY/KWH

SELECT

CLIMATE/SOLAR

OUTSIDE TEMP/°F

DEGREE DAYS
x 1000

WIND SPEED/MPH

ORIENTATION

OVERCAST
BRIGHT NIGHT

SUN

SW S SE

CONCENTRATION

INSIDE TEMP: °F

R CEILING

R WALLS

R FLOOR/ BASEMENT

WOOD INSULATED DOORS

STORM DOORS

LOOSE WEATHERSTRIP

TIGHT WEATHERSTRIP

SINGLE DOUBLE STORM WINDOWS

NONE

NO NIGHT SETBACK

DEGREES

WALLS

CEILING

DOORS

FOUNDATION

WINDOWS

TOTAL

Day
Year
:
BTU

Connected to the Earth

ENVIRONMENTAL HEALTH IN & AROUND THE HOME



A DO-IT-YOURSELF RISK ASSESSMENT PACKET



Created as part of the Home*A*Syst Program

Native American Home*A*Syst

11 individual
fact sheet
assessments,
including home energy
conservation.



More Details

Mike Vogel, Professor
Montana State University Extension
Housing & Environmental Health Program
406.994.3451
mvogel@montana.edu